



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

June 22, 2011

Via E-mail

Christopher A. Artzer
Vice President, General Counsel and Secretary
KiOR, Inc.
13001 Bay Park Road
Pasadena, TX 77507

Re: KiOR, Inc.
Amendment No. 6 to Registration Statement on Form S-1
Filed June 22, 2011
File No. 333-173440

Dear Mr. Artzer:

We have reviewed your registration statement and have the following comment.

Consolidated Financial Statements, page F-1

Consolidated Balance Sheets, pages F-3 and F-30

1. We note the revisions you have made to the stockholders' equity (deficit) section of your consolidated balance sheets; however, it appears that certain amounts, appearing in the aforementioned section of your balance sheets, do not agree with the corresponding amounts on your consolidated statements of stockholders' equity (deficit) on pages F-5 and F-32, which properly reflect the par value of your common stock and class A common stock. In this regard, please revise your financial statements, as appropriate, to reconcile the amounts in the stockholders' equity (deficit) section of your consolidated balance sheets with the corresponding amounts in the consolidated statements of stockholders' equity (deficit). This comment also applies to your capitalization table.

Mr. Christopher A. Artzer
KiOR, Inc.
June 22, 2011
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You may contact Dale Welcome, Staff Accountant, at (202) 551-3865 or, in his absence, John Cash, Accounting Branch Chief, at (202) 551-3768 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Dickerson, Staff Attorney, at (202) 551-3749 or, in her absence, Dietrich King, Senior Staff Attorney, at (202) 551-3338 with any other questions.

Sincerely,

/s/ Dietrich A. King for

Pamela Long
Assistant Director

cc: Via E-mail
Troy Lee
Baker Botts L.L.P.